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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,291	06/12/2001	Aviad Zlotnick	36358	3021

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EXAMINER

LAROSE, COLIN M

ART UNIT PAPER NUMBER

2623

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,291

Applicant(s)

ZLOTNICK ET AL.

Examiner

Colin M. LaRose

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Arguments and Amendments

1. Applicant's amendments and arguments filed 22 October 2004, have been entered and made of record.
2. Applicant's arguments with respect to claims 1, 11, and 21 have been considered but are not persuasive. Applicant argues (see p. 9 of Applicant's Remarks) that the Wilbur reference does not teach displaying his recognition results for verification to the human operator. However, Wilbur was only relied upon to show that it was conventional and advantageous to recognize not only alphanumeric characters, but also non-alphanumeric characters. Chevion discloses the feature of displaying recognition results to an operator for verification, and Wilbur provides a motivation for Chevion to recognize and verify non-alphanumeric characters in addition to alphanumeric characters.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 3-11, 13-21, and 23-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,455,875 by Chevion et al. ("Chevion") in view of U.S. Patent 4,897,880 by Wilber et al. ("Wilber").

Regarding claims 1, 11, and 21, Chevion discloses a method/apparatus/computer-readable medium for image processing, comprising:

analyzing one or more images so as to determine a respective classification for each of a multiplicity of elements in the images (column 4, lines 40-52: OCR is performed on document images in order to classify the characters therein);

displaying together for a human operator a plurality of the elements that have the same classification and were found at different locations in the one or more images (figure 6 and column 4, lines 53-57: the images of a plurality of characters that are all given the same classification are displayed to a user); and

receiving an input from the operator indicative of whether an error occurred in the classification of any of the displayed elements (column 4, lines 58-59: the operator corrects the characters that are erroneously classified).

Chevion discloses that the system is operative to process alphanumeric characters and is silent to the elements not being individual characters in a language or numerical system

Wilber discloses an optical recognition system (figure 1) that is operative to recognize characters. However, Wilber discloses that his system is not limited to the recognition of only alphanumeric characters. Wilber teaches that conventionally, character recognition devices have not been concerned with recognizing non-alphanumeric characters (column 2, lines 53-66) but teaches that his system is advantageously operative to detect and recognize non-alphanumeric characters (column 9, lines 7-24).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Chevion by Wilber so that Chevion's character recognition system can recognize non-alphanumeric characters, since recognizing non-alphanumeric characters lends versatility to a recognition system that classifies only alphanumeric characters.

Regarding claims 3, 13, and 23, Chevion teaches the elements comprise words of more than one character (column 5, lines 46-60: in Chevion's "field-type data entry" process, strings of characters, such as dates, are displayed to an operator for correcting entire words).

Regarding claims 4, 14, and 24, the combination of Chevion and Wilber discloses the elements comprise non-alphanumeric symbols.

Regarding claims 5, 15, and 25, Chevion's analyzing the one or more images comprises carrying out a process of automated image analysis using a computer (figure 1).

Regarding claims 6, 16, and 26, Chevion discloses displaying the plurality of the elements comprises dividing the one or more images into segments, such that one of the plurality

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of the elements is contained in each of the segments, and displaying the segments containing the elements (see figure 6).

Regarding claims 7, 17, and 27, Chevion discloses displaying the segments comprises displaying the segments in a grid pattern on a computer display (see figure 6).

Regarding claims 8, 18, and 28, Chevion discloses displaying the segments comprises displaying the segments on a computer display, and wherein receiving the input comprises sensing a selection of one of the plurality of the elements on the computer display (see figure 6), wherein the selection is made by the operator using a pointing device associated with the computer (mouse 70, figure 2 is used to make selections on the display).

Regarding claims 9, 19, and 29, Cevion discloses that selection of the one of the elements indicates that the classification of the element is erroneous (see figure 6).

Reagrding claims 10, 20, and 30, Chevion discloses prompting the operator to correct the erroneous classification (i.e. the user is prompted when the grid of elements is displayed as in figure 6).

6. Claims 2, 12, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chevion in view of Wilber as applied to claims 1, 11, and 21 above, and further in view of U.S. Patent 4,695,721 by Fulkerson et al. ("Fulkerson").

Regarding claims 2, 12, and 22, Chevion and Wilber are silent to the elements comprising pictures of three-dimensional image features.

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Fulkerson discloses a recognition system that is suitable for recognizing three-dimensional characters, such as those formed by engraving, embossing, or the like (column 1, lines 10-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Chevion and Wilber by Fulkerson to recognize three-dimensional characters, since Fulkerson discloses that there is a need to recognize symbols that are formed in three dimensions on a surface.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (703) 306-3489. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia

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Au, can be reached on (703) 308-6604. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (703) 306-0377.

CML

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1 February 2005



VIKRAM BALI
PRIMARY EXAMINER